

Awarded BME projects at the Silicon Valley International Inventions Festival 2024:

	Awards	Principal investigator and team members	Project title	Project description
1	Gold Medal, Prize of the China Association of Inventions (CAI), Prize of the United Inventors Association of America (UIA)	Professor Raymond Tong Kai-yu, Dr. Fanny Tong, Mr. Xie Disheng, Mr. Su Yujie, Mr. David Shi Xiangqian  (Department of Biomedical Engineering)	Transforming Rehabilitation with Wearable Soft Robotics: XoMuscle Empowering Movement in Patients with Disabilities	The biceps-size XoMuscle is a bionic artificial muscle capable lifting a 20kg water bucket. Compact, flexible and highly efficient, it can be quickly produced using 3D printing
2	Gold Medal	Professor Raymond Tong Kai-yu, Dr. Lu Hsuan-yu, Mr. Ye Zhongping, Mr. Zhu Kun, Miss Cathy Lau Choi-yin  (Department of Biomedical Engineering)	Hope4Care's Markerless Augmented Reality Training System: An Interactive Platform with Real-time Gait Analysis and Visual Feedback	This platform offers a new level of personalised rehabilitation, with ground reaction force measurement on each side. Interactive feedback promotes engagement and motivation to exercise.
3	Gold Medal, Prize of the Korea Invention Promotion Association (KIPA)	Professor Raymond Tong Kai-Yu (Department of Biomedical Engineering, CUHK),  Prof. Joanne YIP Associate Dean (Industrial Partnership) of School of Fashion & Textiles & Professor, Hong Kong Polytechnic University,  Prof. Kenneth M.C. CHEUNG Jessie Ho Professor in Spine Surgery, Chair Professor, Department of Orthopedics and	Development of Intelligent Nighttime Brace with Smart Padding to treat of Adolescent Idiopathic Scoliosis	A skin-friendly, antibacterial cotton fabricas-made nighttime brace with high-performance elastic bands with corresponding buckles, fabric panels that can accommodate auto-adjusting air pads for corrective force and equipped with sensors for effective monitoring.

		Traumatology, The University of Hong Kong; Hospital Chief Executive, The University of Hong Kong - Shenzhen Hospital		
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